Deer Management Permits

A helicopter glides over the thorny scrub brush, its occupants intensively scanning the dense understory for a buck exhibiting exceptional antlers. Suddenly, a buck with a huge set of antlers is spotted as it attempts to evade the aerial predator. The helicopter pilot immediately closes in on the animal. With little cooperation from the deer and much skill by the pilot, the ungulate is hazed into a recently roller-chopped strip of grass when an individual extending outside the bubble of the craft shoots a net from a four-barreled rifle over the buck, rendering the animal immobile. The pilot rotates the craft 180˚ and lands near the entangled deer. Moments later the blindfolded animal is airlifted to its new home inhabited by 20 does.

This activity is conducted by high-fenced landowners who successfully apply for and purchase a Deer Management Permit (DMP) from the Texas Parks and Wildlife Department.

The buck's temporary residence is a high-fenced enclosure that ranges in size from five to 100 acres, providing occupants adequate food, water, and cover. The DMP permit represents a relatively new and unique tool for deer managers interested in maximizing the reproductive capacity of bucks exhibiting highly desirable antler traits in their attempt to elevate antler quality.

A DMP permit allows high-fenced operators to capture a particularly desirable antlered buck on the permitted property and temporarily confine the animal along with a maximum of 20 doe throughout the breeding season. In other words, the largest buck or bucks on these properties is allowed to breed more doe than possible in the wild, while potentially reducing the breeding opportunity for less desirable bucks.

The goal for many landowners is to increase the number of trophy caliber bucks on their properties. Such a goal, based on realistic expectations, is often dictated by geographic location because antler size varies on a regional basis.

The most effective technique when it comes to the development of trophy caliber bucks is to allow them the opportunity to reach their maximum antler-growing years, which for example in South Texas is six to seven years. My management philosophy addressing this objective is: "If you do not have deer dying of old age, or more importantly, 45% of the male segment of the deer herd is in the 4.5+ year age category, you are not truly managing for trophy deer". In other words, a substantial number of mature bucks must exist in order to realize those few that develop exceptional antlers. Allowing bucks to live to maturity is the most feasible way of developing larger racked animals because it is the most natural method of doing so. The fact is, bucks generally develop larger racks as they age, but not all develop those racks we search for regardless how old they get.

The selective removal of bucks exhibiting less than desirable antler traits by hunters has become extremely popular over the last few years, but judgmental errors in the selection process often eclipses this concept's potential.

Theoretically, culling is a practice in which animals of both sexes exhibiting undesirable phenotypic (visible) traits are removed. However, most operations focus solely on males, a situation which handicaps results. Why--because doe contribute equivalently to their offspring's genetic makeup and this includes antler size. In other words, when a buck exhibiting outstanding antlers breeds a doe that does not genetically pass on that unique antler trait, or if the buck's antler trait is recessive, or the doe has

some overriding dominant genetic trait, there is little to no chance that the male offspring will mimic the sire's antler configuration or size. Trophy buck production is a gamble, thus remains a roll of the dice at best, with decisions made wrong as often as they are correct.

Researchers employing state of the art DNA science have provided evidence that some bucks, regardless antler size, do not breed the number of doe we once believed. A particular buck may breed only one or two doe throughout the breeding season. In some cases that same buck may not breed at all, thus by obtaining a DMP permit, this concern is eliminated.

It's also important to realize that all bucks, including yearlings, can and do participate in the rut. By genotyping a large sample size of an enclosed deer population, a University of Michigan study provided evidence that twin deer are not always single parented and that a set of twins can have different fathers. More importantly, this occurs more often with younger does bred by young bucks.

Wildlife researcher Anna Bess Soren employed DNA analyses on 117 fetuses representing 37 single fetuses, 37 sets of twins, and two sets of triplets to match individual fetuses to the buck that sired it. Out of 37 sets of twins, both fetuses in 27 sets were confidently matched to a sire. In six (22%) of these 27 pairs, DNA analysis showed that the two fetuses were sired by two different bucks. The researchers also found that the age of the two sires were different, with one buck from the oldest age class in the study (5 ½ to 6 ½ +) and one younger buck ranging in age from adolescent to mature.

Although the number of doe bred by young bucks is presumably reduced in balanced Texas herds, the possibility of young, potentially inferior bucks breeding could

have some genetic impact on intensely managed deer herds, particularly smaller, enclosed herds.

Based on other behavior studies, researchers have found that mature bucks often accompany a doe over a 24-hour receptive period. By doing so, the sire prevents the doe from being bred by others. A young buck would experience difficulty if it attempted to breed a doe when accompanied by an adult. However, in herds with sex ratios favoring females where a majority of the mature bucks can potentially be preoccupied at peak rut, young bucks of questionable genetic potential, that are socially accepted into family units of does, have the opportunity to breed a young doe early in its 24-hour cycle prior to any interference by a mature buck.

Most hunters agree with the removal of bucks exhibiting less than desirable antler qualities, but the point they miss is that bucks displaying desirable antler traits must be protected. Hunters have no problem when it comes to shooting a potentially undesirable buck based on its phenotypic (visible) traits, but they often continue to harvest bucks exhibiting desirable antler qualities. Allowing bucks to mature is the most effective tool in big buck production, and one of the two commandments of deer management—age and nutrition—that sportsmen have control over with the potential of seeing some realistic, achievable results.

Initiating a buck culling system is not difficult; the challenge is regulating and adjusting it. For example, most individuals agree that desirable bucks would be those exhibiting 10 antler points or more. Thus, the ones to select against would be mature or older bucks with less than 10 points.

The generally accepted criteria dictating undesirable antler traits is that the animal is minimally five years of age and exhibits eight antler points or less. As a result, those exhibiting truly undesirable antler qualities are protected as hunters focus on harvesting the largest eight pointers. With outstanding eight-point bucks targeted, older aged deer with 10 points exhibiting undesirable antler qualities such as extremely short tines, short beams, and missing brow tines are allowed to enter the breeding hierarchy of the deer herd.

Culling bucks makes sense; however, it is a concept that must be thoroughly understood and upheld by the hunters because they make the ultimate management decision each time they pull that trigger. The problem is mistakes are going to occur.

Selective harvest based on undesirable antler characteristic does play a role in management, but for some, it is simply an excuse to shoot more deer. To the astute deer manager, however, it is a practical way of controlling the male population in a well-managed herd while attempting to reduce the prevalence of those so-called undesirable antler traits.

The acquisition of a DMP permit complements a well designed management program that employs a selective harvest. Not only does this permit allow managers more rolls of the dice by increasing the reproductive potential of a particular male, it more importantly relaxes the pressure placed on those individuals performing the culling process. By capitalizing on the fact that 20 doe are covered by a single highly desirable buck, selection procedures for undesirable bucks in the wild can be ratcheted up simply based on the assumption that mistakes are eclipsed by the significant number of doe bred by a desirable sire.

The DMP permit has no limitations on number of enclosures one can build, increasing the probability of genetically impacting a particular deer herd.

Additionally, genetically proven deer from a licensed deer breeder can be obtained and used in a DMP pen, increasing the probability of developing bucks demonstrating outstanding antler qualities even more.

The DMP permit is the most progressive step towards the development of trophy caliber deer I have witnessed over the last 31 years, but it's important to remember that the development of outstanding whitetail remains a game of probability enhanced by the quality of habitat they live in.

This tool, referred to as a DMP, has merit, but remains expensive. At $300 per helicopter-captured deer, a pen containing 21 deer (1 buck and 20 doe) would cost $6,300. More importantly, survival rates of fawns post release is questionable at this time and must be investigated.

It's also critical to note that if the most important ingredients to deer management—age and nutrition—are not satisfied, trophy bucks can never develop regardless the permitted activities conducted.